

AMENDMENTS TO THE CLAIMS

1-4. (Canceled)

5. (Currently amended) A method for estimating the signal to noise ratio of a picture signal decoded from a compressed bit-stream, comprising the steps of determining the quantization values employed in said compression, generating a measure of the bit rate of the compressed bit-stream and deriving said estimate by processing said quantization values and said measure of the bit rate.

6-12. (Canceled)

13. (New) A method according to Claim 5, wherein the step of determining the quantization values comprises the step of deriving an average quantizer value for a picture.

14. (New) A method according to Claim 13, wherein said average is taken in a logarithmic domain.

15. (New) A method according to Claim 5, further comprising the step of using said measure of the bit rate to form a measure of picture activity.

16. (New) A method according to Claim 15, in which the compressed bit-stream includes predicted and non-predicted pictures, and wherein said measure of picture activity is formed of the most recent non-predicted picture.

17. (New) A method according to Claim 15, wherein the measure of picture activity comprises a product of a number of compression bits and a further function of quantization.

18. (New) A method according to Claim 17, wherein said further function of quantization is a quadratic function.

19. (New) A method according to Claim 17, wherein said further function of quantization is modified to take into account deviations from a pre-defined quantization weighting matrix.

20. (New) A method according to Claim 5, wherein a base signal to noise ratio is taken as an experimental value of signal to noise ratio employing the finest allowable quantization and a pre-determined quantization weighting matrix.

21. (New) A method according to Claim 5, wherein the quantization values are quantizer level spacings.

22. (New) A method according to Claim 5, wherein a noise measure taken at an upstream location is passed forward for comparison with a noise measure taken at the device under test.

23. (New) A method for estimating the signal to noise ratio $PSNR_{estimate}$ of a picture signal decoded from a compressed bit-stream, comprising the steps of determining quantization values q employed in said compression; generating a measure c of the bit rate of the compressed bitstream and processing said values and said measure to derive:

$$PSNR_{estimate} = PSNR_0 - \frac{\sum \log q}{N} (A + B \sum c \cdot f(Mq))$$

where A is a parameter that can be zero and B is a parameter that can be 1.

24. (New) A method according to Claim 23, wherein a base ratio $PSNR_0$ is taken as an experimental value of signal to noise ratio employing the finest allowable quantization and a pre-determined quantization weighting matrix.

25. (New) A method according to Claim 23, wherein the function $f(q)$ is a quadratic function of q .

26. (New) A method according to Claim 23, wherein the quantization values are quantizer level spacings.

27. (New) A method according to Claim 23, wherein a noise measure taken at an upstream location is passed forward for comparison with a noise measure taken at the device under test.